

**Atty Docket: 4081-01701**  
**(09/660,450US1)**

**Patent**

## **REMARKS/ARGUMENTS**

### ***Status of Claims***

Claims 1-9 have been amended.

Claims 10-18 and 20-28 have been canceled.

Claims 29-43 have been added.

As such, claims 1-9, 19 and 29-43 are currently pending in this application.

Applicants hereby request further examination and reconsideration of the presently claimed application.

### ***September 24, 2004 Office Action***

According to the September 24, 2004 Office Action, Applicants' response filed July 14, 2004 was deemed not fully responsive to the April 14, 2004 Office Action for failing to present arguments pointing out the specific distinctions to render newly submitted claims 31-43 patentable over any applied references. Applicants respectfully traverse this allegation. The last paragraph on page 8 in Applicants' April 14, 2004 response clearly and unequivocally states that each and every element of the newly added independent and dependent claims is not disclosed in *Komoto*. Applicants further provide specific arguments as to why the recited elements are distinguished from *Komoto*. Thus, Applicants respectfully request that the Examiner reconsider and withdraw the assertion of incomplete response contained in the September 24, 2004 office action. In the alternative, in an effort to substantively advance prosecution and respond to the Examiner's concerns, Applicants have supplemented the following response to specifically address new claims 31-43.

***Patentability of claims 1-9, 19, and newly added claims 29-43 in view of the 35 USC §102(b)***

***Rejection by Komoto***

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Certain of the claims stand rejected under 35 USC §102(b) as being anticipated by *Komoto* (4,069,272). Specifically, the Examiner notes that the pending claims are product by process claims and that the recited process steps are not given patentable weight. Applicants respectfully submit that nonetheless, “[t]he structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art” per MPEP 2113. The dimerization process disclosed by Applicants, namely a 1,2 insertion followed by a 2,1 insertion, implies a novel product structure having improved amounts of linear alpha-olefin dimers, reduced amounts of unwanted byproducts, and improved conversion of olefins to dimers. See e.g., page 3, lines 9-14. Accordingly, independent claim 1, and claims 1-9, 19, 29-30, and 37-42 depending there from, have been amended to recite a product comprising from about 30 to about 85 weight percent linear-alpha olefin dimers and about equal to or greater than 20 weight percent of the initial and second olefins are converted to linear alpha-olefin dimers. Independent claim 31, and claims 32-35 depending there from, have been added to recite a product comprising less than about 5 weight percent vinylidene or tri-substituted olefins and about equal to or greater than 20 weight percent of the initial and second olefins are converted to linear alpha-olefin dimers. New reaction product claim 36 has been added reciting a product comprising less than about 5 weight percent vinylidene and wherein about equal to or greater than 20 weight percent of the first and second olefins are converted to the linear alpha-olefin dimers. New reaction product claim 43 has been added reciting a product comprising from about 30 to about 85 weight percent linear-alpha olefins and wherein about equal to or greater than 20 weight percent of the first and second olefins are converted to the linear alpha-olefin dimers.

Applicants respectfully submit that each and every element of products recited in the pending claims 1-9, 19 and newly added claims 29-43 are not disclosed in *Komoto*. Specifically,

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*Komoto* uses a different catalyst system, is silent regarding the mechanism of insertion (e.g., a 1,2 insertion followed by a 2,1 insertion), and discloses a product having a much lower conversion of olefins, e.g., 8.5% conversion of 1-hexene to higher olefinic products in Example 1. For the foregoing reasons, Applicants respectfully submit that *Komoto* does not anticipate or make obvious the pending claims 1-9 and 19 and newly added claims 29-43.

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## CONCLUSION


Applicants respectfully submit that the present application as amended is in condition for allowance. If the Examiner believes it would assist in expediting the application, Applicants welcome a telephone conference with the Examiner to improve understanding of and resolve any questions or issues of the Examiner.

The Commissioner is hereby authorized to charge any fee connected with this communication to Deposit Account No. 50-1515, Conley Rose, P.C.

Respectfully submitted,

CONLEY ROSE, P.C.

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